

# Pacific Northwest National Laboratory Environmental Management Performance Report

**September 2000**

**PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE  
OFFICE OF ENVIRONMENTAL MANAGEMENT**

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**Pacific Northwest National Laboratory  
Operated for the U.S. Department of Energy  
by Battelle Memorial Institute**



## Table of Contents

INTRODUCTION .....	1
EXECUTIVE SUMMARY .....	2
SAFETY OVERVIEW .....	2
COST/SCHEDULE PERFORMANCE STOPLIGHT .....	4
PROJECT PERFORMANCE SUMMARY .....	5
MISSION .....	5
PERFORMANCE DATA AND ANALYSIS .....	5

***Introduction***

This document provides the Department of Energy Richland Operations Office (DOE-RL) with a report of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors.

In Section A, the Executive Summary, text and graphics report the safety metrics status for all PNNL activities. Senior management's overall performance assessment of all Environmental Management activities conducted at PNNL is presented in a stoplight chart.

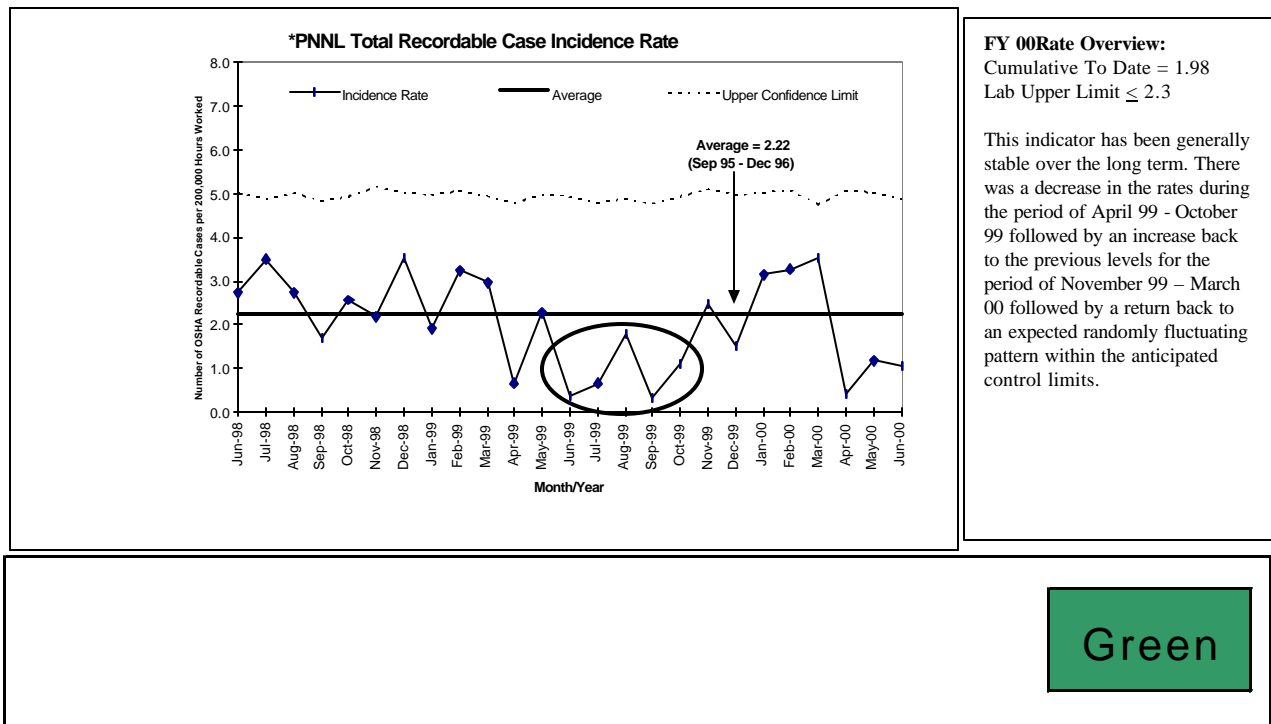
Section B, Project Performance Summary, provides a brief summary of the month's performance for the PNNL lead activity, PNNL Waste Management (PBS RL-ST01). More detailed information can be found within PNNL-7911-105a, PNNL's Project Status Report for June 2000. Summary analyses pertaining to PNNL's support to other Project Baseline Summaries (PBSs) are addressed in the contractor's report having lead responsibility for that scope.

Unless otherwise noted, information in this report is current as of July 30, 2000.

This section provides an executive-level summary of performance information and is intended to bring to management's attention that information considered to be most noteworthy. The section begins with overviews of safety, followed by a stoplight chart on overall performance.

## Safety Overview

The focus of this section is on documenting trends in work-related injuries and illnesses rates. Improvements in these rates result from PNNL's continued implementation of the Integrated Environment, Safety, and Health Management System (ISMS), and the current development and implementation of the Voluntary Protection Program (VPP). Injury and illness statistical data are presented graphically in this section, followed by a summary of the completed and planned actions for the PNNL VPP.

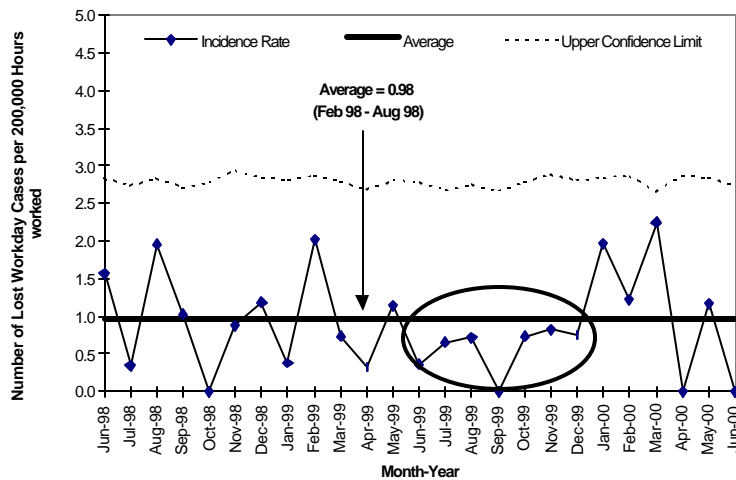


\*Includes all Pacific Northwest National Laboratory Operations.

# PNNL Environmental Management Performance Report – September 2000

## Section A - Executive Summary

**\*PNNL Lost Workday Case Incidence Rate**



**FY 00Rate Overview:**

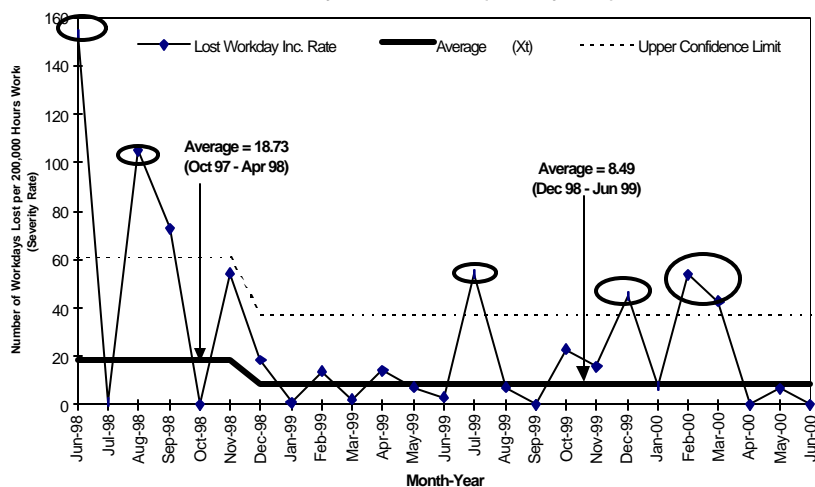
Cumulative To Date = 1.01  
Lab Upper Limit  $\leq 1.2$

This indicator has been generally stable over the long term. There was a temporary short-term decrease during the period of June 99 - December 99 followed by a return back to an expected randomly fluctuating pattern within the anticipated control limits.

Green

\*Includes all Pacific Northwest National Laboratory Operations.

**\*PNNL Lost Workday Incidence Rate (Severity Rate)**



**FY 00Rate Overview:**

Cumulative To Date = 21.94  
Lab Upper Limit  $\leq 30.0$

The data for the last three months have been randomly cycling within the normal anticipated control limits. The December 98 – June 99 baseline was adjusted because of further accumulation of lost workdays on cases which occurred within that time period. The months that are above the upper control limit with cases currently accumulating lost workdays are June 98 and March 00.

Green

\*Includes all Pacific National Laboratory Operations.

## Cost/Schedule Performance Stoplight

The following rating reflects overall cost and schedule performance for activities conducted by PNNL.  
(*Narrative not required when rating is green.*)



Green: Satisfactory  
Yellow: Significant improvement required  
Red: Unsatisfactory

This section provides cost and schedule performance, any significant issues, and upcoming baseline change requests for the period covered. In fiscal year (FY) 2000, Battelle Memorial Institute has lead responsibility over PBS RL-ST01, PNNL Waste Management WBS 1.7.1.

## Mission

WBS 1.7.1 provides PNNL with waste management services and compliant operations in support of science and technology development for the multiprogram needs of the U.S. Department of Energy (DOE) Complex. These services include:

- essential surveillance and maintenance of DOE laboratory facilities assigned to PNNL for safe containment of radioactive and hazardous materials
- infrastructure required to manage wastes and effluents currently generated at the PNNL
- operational compliance services to meet regulatory requirements and operating permits including environment, safety, and health regulations
- management of legacy wastes and contamination remaining from past PNNL research operations.

## Performance Data and Analysis

As of July 30, 2000 the cumulative costs are \$10.8 million with a positive cost variance of \$0.4M and a cumulative schedule variance of negative \$1.4M. Though a majority of the schedule variance will be recovered prior to the end of the fiscal year a brief explanation of the activities that will not recover are described following the tables and chart.

<b>Cost Performance (\$M):</b>			
	<b>BCWP</b>	<b>ACWP</b>	<b>Variance</b>
<b>PNNL Waste Management</b>	\$11.2	\$10.8	\$0.4
<b>Schedule Performance (\$M):</b>			
	<b>BCWP</b>	<b>BCWS</b>	<b>Variance</b>
<b>PNNL Waste Management</b>	\$11.2	\$12.6	(\$1.4)

### **FY 2000 Cost/Schedule Performance - All Fund Types** **Cumulative to Date Status - (\$000)**

<b>WBS</b>	<b>PBS</b>	<b>BCWS</b>	<b>BCWP</b>	<b>ACWP</b>	<b>CV</b>	<b>%</b>	<b>SV</b>	<b>%</b>
1.7.1	RL-ST01	<u>\$12,633</u>	<u>\$11,200</u>	<u>\$10,780*</u>	<u>\$420</u>	<u>4</u>	<u>\$(1,433)</u>	<u>-11</u>
<b>Total</b>		\$12,633	\$11,200	\$10,780*	\$420	4	\$(1,433)	-11

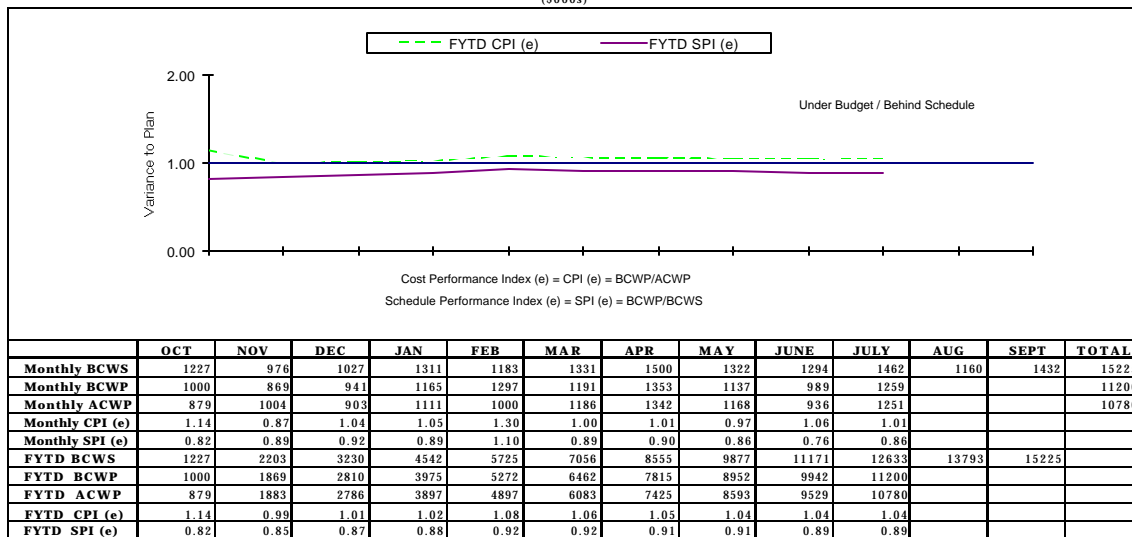
\* Numbers reflect PNNL only; \$22K expended by Fluor bringing actuals to \$10,822K.



**PNNL Environmental Management Performance Report - September 2000**  
**Section B - Project Performance Summary**

**Cost / Schedule Performance Indices**

FY 2000 Cum to Date Status  
(\$000s)



The positive cost variance of \$0.4M results from reduced overhead rates and delayed billings. A change request was approved on July 17 to address building maintenance enhancements within Radiochemical Processing Laboratory (RPL) using programmatic underruns. These enhancements will reduce RPL annual expenditures by \$25K. It is expected that the remaining programmatic baseline activities will be completed within the funding allocation.

The cumulative schedule variance has exceeded the reporting threshold by 1%. The primary reasons for the cumulative schedule variance of negative \$1.4M are described below:

- Difficulties in completing the final details in the high-dose waste container design delayed initiating fabrication of the drum-handling system. Delays will postpone shipments into first quarter of the next fiscal year. There is no impact associated with this delay. A baseline change request was submitted August 4 to revise the schedule baseline.
- Planned LR-56 cask shipments to the 200 Area for final disposition are affected by the radioactive liquid waste system (RLWS) delay. One shipment of waste was deleted following approval and implementation of a change request. At this time, as much waste as possible is being held for the radioactive liquid waste tank (RLWT) when it comes on line. The remaining scheduled waste shipment affected by the RLWS will be rebaselined into FY 2001 via a change request.

The integrity assessment of the RLWT-piping is currently on hold with no defined completion date. The integrity assessment was delayed because the 204-AR Facility (receiver facility) is not ready, and Pacific Northwest did not want to add any liquids to the tank to make it a radiologically controlled tank until the receiver facility is ready. The earliest the 204-AR Facility will receive waste via the LR-56 Truck is FY 2001.